ABSTRACT

A genomic DNA encoding a human imidazoline receptor is described. cDNAs encoding the receptor and fragments thereof are also provided. An amino acid sequence predicted to be 120,000 MW for nearly the entire protein is identified, as well as a middle fragment believed to contain the imidazoline binding site of the receptor. The protein is highly unique in its sequence and may represent the first in a novel family of receptor proteins. Methods of cloning the cDNA and expressing the imidazoline receptor in a host cell are described. Methods of preparing antibodies against the transfected protein are also described. Also, a screening method for identifying additional subtypes of this receptor are identified. Also, screening methods for identifying drugs that interact with the imidazoline receptor are described.